"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ACC NR: AP6033435

polation of the measurement results to atmospheric conditions shows that for the air layer next to the earth the contribution of the complexes $[O_2]_2$ and $[O_2 - N_2]$ to the attemuation of the radiation in the 2600 - 2350 Å band is practically the same as the contributions of O_2 and O_3. The author thanks G. V. Rozenberg for interest in the work and G. D. Turkin for help with the measurements. Orig. art. has: 3 figures, 2 formulas, and 2 tables.

SUB CODE: 20/ SUBM DATE: 10May65/ ORIG REF: 008/ OTH REF: 005

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ACC NR: AP7001863 SOURCE CODE: UR/0362/66/002/012/1253/1258

AUTHOR: Dianov-Klokov, V. I.; Matveyeva, O. A.

ORG: Institute of Atmospheric Physics, Academy of Sciences SSSR (Institut fiziki atmosfery, Akademiya nauk SSSR)

TITLE: The effect of $[O_2]$ and $[O_2—N_2]$ complexes on the transparency of the atmospheric surface layer

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 12, 1966, 1253-1258

TOPIC TAGS: atmospheric physics, atmospheric transparency, atmospheric optics, molecular absorption, Rayleigh scattering, ozone, aerosol

ABSTRACT: Direct measurements and laboratory data imply that approximately 40% of the total diffuse molecular absorption in the lower atmosphere in the 2800—2300 Å region is due to short-lived $[O_2]_2$ and $[O_2—N_2]$ complexes. The contribution of molecular oxygen (O_2) is approximately the same. The sum of decimal absorption coefficients for these constituents and for the Rayleigh scattering coefficient equals unity at 2400 Å, and increases rapidly with decreasing wavelength. Even for a minimum concentration of aerosols and ozone in the lower atmosphere, the atmospheric transparency

Card 1/2 UDC: 551.521.3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ACC NR: AP7001883

limit in the ultraviolet region is estimated to occur at λ = 2400—2500 Å. Orig. art. has: 4 figures.

SUB CODE: 04/ SUBM DATE: 07May66/ ORIG REF: 001/ OTH REF: 006/
ATD PRESS: 5112

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

DIANOVA, A.

We'll have a housewarming soon. Okhr.truda i sots.strakh. no.12:46 D '59. (MIRA 13:4)

1. Predsedatel' komissii okhrany truda tsekha shassi Vladimirskogo traktornogo zavoda, deputat gorodskogo Soveta.
(Vladimir—Tractor industry)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

53630 2209, 1266, 1287

86411
S/062/60/000/008/019/033/XX
B013/B055

AUTHORS: Arbuzov, B. A. and Dianova (Ukhvatova), E. N.

TITLE: 2-Cyclopentenyl-1-phosphinic Acid Esters and Some Derivatives

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 8, pp. 1399-1404

TEXT: The effect of trialkyl phosphites and sodium dialkyl phosphites on 3-chloro 1-cyclopentene was studied in the present paper. Treatment of 3-chloro 1-cyclopentene with triethyl phosphite did not yield the desired result: The reaction did not take place at lower temperatures, while at 120°C cyclopentadiene formed in quantitative yield by elimination of hydrogen chloride. With triethyl phosphite, the latter gave ethyl chloride and diethyl phosphinic acid. The reaction of 3-chloro 1-cyclopentene with sodium diethyl phosphite, however, gave the expected cyclopentenyl phosphinic acid ester. By similar reactions, other esters of 2-cyclopentenyl 1-phosphinic acid were obtained. These esters are readily oxidized by acetyl hydroperoxide with formation of the corresponding oxides. The oxidation of the 2-cyclopentenyl 1-phosphinic acid n-butyl and isobutyl esters by acetyl hydroperoxide, gave besides the oxides also higher-

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

2-Cyclopentenyl-1-phosphinic Acid Esters and Some Derivatives

S/062/60/000/008/019/033/XX
B013/B055

boiling fractions. By ultimate analysis and molar refraction, the compounds obtained are shown to correspond to products formed by the elimination of one molecule of water from glycols. The existence of a double bond in these compounds was established by titration with peroxy-phthalic acid and the infrared spectrum of the isobutyl ester. The position of the double bond is still unclear. The formation of cyclopentenyl phosphinic acid ester is explained by the splitting off of acetic acid during distillation of the oxide obtained with acetyl hydroperoxide. The previously observed stability (Ref. 4) of carbocyclic oxides containing a COOR or CN-substituted six-membered ring towards isomerizing agents was confirmed. The oxides readily hydratized in aqueous dioxane in the presence of hydrochloric acid. The 2,3-dihydroxy-(trans)1-cyclopentyl 1-phosphinic acid esters are viscous and can be distilled in vacuo without decomposition. There are 3 tables and 5 Soviet references.

ASSOCIATION: Khimicheskiy institut im. Butlerova Kazanskogo universiteta im. V. I. Ul'yanova-Lenina (Chemical Institute imeni Butlerov of Kazan' University imeni V. I. Ul'yanov-Lenin)

SUBMITTED: March 17, 1959

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ARBUZOV, B.A.; DIANOVA, E.N.

Esters of cyclohexen-2-yl-1-phosphonic acid and some of their derivatives. Izv. AN SSSR. Otd.khim.nauk no.7:1288-1291 Jl '61. (MIRA 14:7)

1. Khimicheskiy institut im. A.M. Butlerova Kazanskogo universiteta im. V.I. Ul'yanova-Lenina.

(Phosphonic acid)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ARBUZOV, B.A.; DIANOVA, E.N.; SHAGIDULLIN, R.R.

Reaction of carbon disulfide with sodium diethylphosphite.
Zhur.ob.khim. 31 no.12:4015-4019 D '61. (MIRA 15:2)

1. Nauchno-issledovatel'skiy khimicheskiy institut imeni A.M. Butlerova pri Kazanskom gosudarstvennom universitete i Kazanskiy filial AN SSSR.

(Carbon disulfide)
(Phosphorous acid)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ARBUZOV, B.A., DIANOVA, E.N.

Esters of cyclopentene-2-yl- and cyclohexane-2-yl phosphinic acids and certain of their deriatives.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. Arbuzov, Ed. Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, [illegible] pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 16080-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 SSD/AFWL JXT(CZ)/RM
ACCESSION NR: AP5001947 S/0020/64/158/001/0137/0140

AUTHOR: Arbuzov, B A. (Academician); Dianova, E. N.; Vinogradova, V. S ; Shamsutdinova, A. K.

TITLE: Reaction of sodium diethylphosphide with 1, 2-dibromocyclohexane and 1, 2-dibromomethane

SOURCE: AN SSSR. Doklady, v. 158, no. 1, 1964, 137-140

TOPIC TAGS: phosphorus compound, hexane, bromine, organosodium compound, distillation

Abstract: The reaction of sodium diethylphosphide with 1, 2-dibromocyclohexane was studied to determine which phosphorus derivatives are formed. The following compounds were found after distillation of the resulting cyclohexane and phosphorus-containing products: 1) diethylphosphorous acid; 2) a fraction with a 61-61.5° boiling point (2.5 mm), which proved to be a mixture of dibromocyclohexane (60%) with triethylphosphate (40%); 3) tetraethylpyrophosphite; 4) tetraethyl ester of subphosphoric acid; 5) a fraction with a 131-134° (2 mm) boiling point, which may prove to be tetraethylpyrophosphate, although its physical constants differed somewhat from pyrophosphate constants. It was thus found that organophosphorus

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 15080-65
ACCESSION NR: AP5001947

compounds obtained in the reaction of dibromocyclohexane with sodium diethylphosphide proved to be the same as those for the reaction of sodium diethylphosphide with bromine. Orig. art. has 3 articles and 1 figure.

ASSOCIATION: Nauchno-issledovatel'skiy institut im. A. M. Butlerova (Scientific Research Institute); Kazanskogo gosudarstvennogo universiteta im. V. I. Ul'yanova-Lenina (Kazan' State University)

SUBMITTED: 09May64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 005 OTHER: 007 JPRS

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ARBUZOV, B.A.; DIANOVA, E.N.; VINOGRADOVA, V.S.; SHAMSUTDINOVA, A.K.

Nature of di-α-cyanoisopropyl ester of phosphorous acid.
Izv. AN SSSR. Ser. khim. no.8:1389-1396 '65.
(MIRA 18:9)

1. Khimicheskiy institut im. A.M. Butlerova Kazanskogo gosudarstvennogo universiteta.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 1129-66 (N) EWT(l)/EWT(m)/EPF(c)/EWP(j)/EWA(h)-2/EWA(c) RPL JW/BW/RO/RM

ACCESSION NR: AP5022930 UR/0062/65/000/008/1389/1396
661.718.1

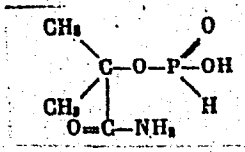
AUTHOR: Arbuzov, B. A.; Dianova, E. N.; Vinogradova, V. S.; Shamsutdinova, A. K.

TITLE: The nature of di-α-cyanisopropyl ester of phosphorous acid

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya no. 8, 1965, 1389-1396

TOPIC TAGS: ester, phosphorous acid, IR spectrum

ABSTRACT: The structure of di-α-cyanisopropyl



and tri-α-cyanisopropyl esters of phosphorous acid were investigated by IR spectroscopy. The IR spectra were taken using a Higler H-800 spectrophotometer. The 2000--3500 cm^{-1} range was investigated with an IKS-14 spectrophotometer. The IR spectrum

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 1129-66

ACCESSION NR: AP5022930

of di-α-cyanisopropyl ester of phosphorous acid is shown in fig. 1 of the Enclosure. To verify the structure, these spectra were compared with the spectra of products from hydrolysis of the chloroanhydride of di-α-cyanisopropyl phosphoric acid. It was found that di-α-cyanisopropyl as well as tri-α-cyanisopropyl esters of phosphoric acid contain an atom of pentavalent phosphorous. Orig. art. has: 5 figures, 1 formula.

ASSOCIATION: Khimicheskiy institut im. A. M. Butlerova Kazanskogo gosudarstvennogo universiteta (Chemical Institute, Kazan State University) 44,55

SUBMITTED: 24Jun63 ENCL: 01 SUB CODE: GC, OC

NO REF SOV: 003 OTHER: 007

Card 2/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 1129-66

ACCESSION NR: AP5022930

ENCLOSURE: 01

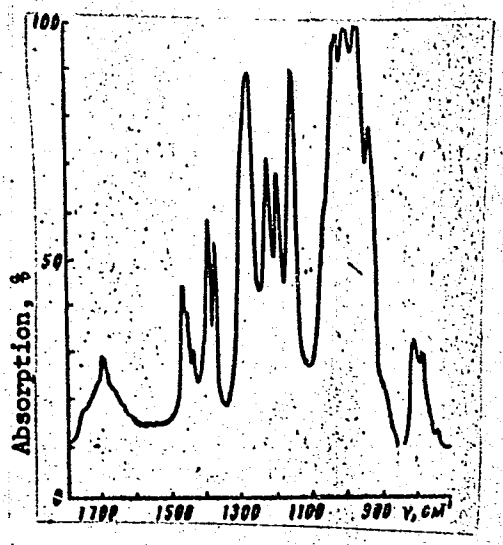

Fig. 1.

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ARBUZOV, B.A.; DIANOVA, E.N.

Azeotropes of dialkylphosphorous acids with some alcohols.
Izv. AN SSSR. Ser. khim. no.9:1584-1591 '65. (MIRA 18:9)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-Lenina.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 20773-66 EWP(j)/EWT(m) RM

ACC NR: AP6012034 SOURCE CODE: UR/0020/65/160/001/0099/0102

AUTHOR: Arbuzov, V. A. (Academician); Dianova, E. N.; Vinogradova, V. S.; Shamsutdinova, A. K.

ORG: Chemical Institute im. A. M. Butlerov, Kazan' State University im. V. I. Ul'yanov-Lenin (Khimicheskiy institut pri Kazanskom gosudarstvennom universitete)

TITLE: Reactions of tri-(alpha-cyanoisorpropyl) phosphite, ethyl-di-tert-(beta,beta, beta-trichlorobutyl) phosphite, and tri-(beta,beta,beta-trichloroethyl) phosphite with chloral

SOURCE: AN SSSR. Doklady, v. 160, no. 1, 1965, 99-102

TOPIC TAGS: organic phosphorous compound, chlorine compound, ester, chemical reaction

ABSTRACT: Tri-(alpha-cyanoisopropyl) phosphite was found to react with chloral at room temperature, forming the di-alpha-cyanoisopropyl ester of alpha-hydroxy-(beta,beta,beta-trichloroethyl)-phosphinic acid, splitting off methacryl-onitrile. The reaction between chloral and tri-ter-(beta,beta,beta-trichlorobutyl) phosphite produced di-ter-(beta,beta,beta-trichlorobutyl)-phosphorous acid, which in turn reacted with chloral to give the di-ter-(beta,beta,beta-trichlorobutyl) ester of alpha-hydroxy-beta,beta,beta-trichloroethylphosphinic acid. The reaction of chloral with mixed di-ter-(beta,beta,beta-trichlorobutyl)-ethyl phosphite produced the di-ter-(beta,beta,beta-trichlorobutyl) ester of alpha-hydroxy-beta,beta, beta-trichloroethylphosphinic acid and di-ter-(beta,beta,beta-trichlorobutyl)-(beta,beta,-dichlorovinyl) phosphate. Another complete phosphite with electro-negative groups in the ester radicals, tri-(beta,beta,beta-trichloroethyl)

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 20773-66

ACC NR: AP6012034

phosphite, reacted with chloral at room temperature to give the di-beta,beta,beta-trichloroethyl ester of alpha-hydroxy-beta,beta,beta-trichloroethylphosphinic acid. The reaction mechanisms and infrared spectra of the reaction products are discussed. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 07 / SUBM DATE: 11Jun64 / ORIG REF: 005 / OTH REF: 003

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

L 26749-66 EWT(m) JD/JG

ACC NR: AP5011479 SOURCE CODE: UR/0070/66/011/002/0334/0338

AUTHOR: Belyayev, L. M.; Litvin, B. N.; Dianova, I. M.; Mel'nikov, O. K. 40 B

ORG: Institute of Crystallography, AN SSSR (Institut kristallografii AN SSSR)

TITLE: Hydrothermal synthesis of crystal phosphors of the type $Na_xZn_ySi_pO_q$

SOURCE: Kristallografiya, v. 11, no. 2, 1966, 334-338

TOPIC TAGS: zinc compound optic material, crystal phosphor, synthetic material, luminescence, luminescence spectrum

ABSTRACT: This is a continuation of earlier research (Kristallografiya v. 9, no. 6, 943, 1964) on hydrothermal synthesis of sodium zinc silicates. The present article describes six different crystal phosphors synthesized by this method, with different relative compositions of the components (Na_2O-ZnO-SiO_2-H_2O) and their crystal structures. To obtain luminescent zinc silicates of sodium, an activator in the form of MnO was introduced in the charge. Five out of the six crystals produced a luminescence in the green region of the spectrum under the influence of ultraviolet light, although the maxima were not the same for all crystals. One of the produced crystals was the previously produced willemite Zn_2SiO_4(Mn) whose luminescent properties are well known. However, the maximum obtained for this crystal was somewhat different from the published data, and this difference is ascribed to the difference in the method of preparing the crystal. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 09Feb65/ ORIG REF: 004/ OTH REF: 003

Card 1/1 UDC: 548.52

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ACCESSION NR: AP4043196 S/0070/64/009/004/0571/0574

AUTHORS: Litvin, B. N.; Dianova, I. M.; Kachan, L. A.

TITLE: Synthesis and properties of single crystals of the compound $Na_2O.2MnO.2SiO_2$

SOURCE: Kristallografiya, v. 9, no. 4, 1964, 571-574

TOPIC TAGS: crystal growth, synthetic crystal, manganese compound, silicate, single crystal

ABSTRACT: The authors attempted to synthesize hydrothermally a manganese silicate in which the Mn-Mn interaction is weakened by some "inert" component. Sodium was found suitable for this purpose. The crystallization was carried out in a 200-cm^3 autoclave lined with titanium. A mixture of MnO and SiO_2 was placed at the bottom of the autoclave and a concentrated solution of sodium hydrate was poured over it. The closed autoclave was then placed in a resistance

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ACCESSION NR: AP4043196

oven for 200 hours and subsequently cooled for 8--10 hours. Large crystals were obtained when the temperature gradient amounted to 1 deg/cm. No change in the production of crystals was observed on changing the concentration of the solute from 20 to 35 weight per cent, or on varying the ratio of MnO to SiO_2 from 2:1 to 1:2. On lowering the NaOH concentration the yield decreases; on increasing the concentration larger crystals (up to 10 mm) are obtained. The crystals are amber in color, transparent, and optically positive. Their specific gravity is 3.46 $\pm$ 0.2, the hardness 6, the luster glassy, and the fracture conchoidal. The indices of refraction are: $n'_g = 1.656$, $n'_m = 1.647$, $n'_p = 1.641$. The crystals are monoclinic with $a = 8.4$, $b = 13.6$, and $c = 5.69$ A; $\beta = 90°$ and $Z = 2$. The space group is $P2_1/c$. The best developed faces are the (100), (110), (120), and (101). The interplanar distances are given in a table (Encl. 01). The chemical composition of the crystals is SiO_2--36.5%, Fe_2O_3--traces, MnO--44.01%, Na_2O--18.80%. The proposed formula may be $Na_2Mn_2Si_2O_7$. The sodium to manganese ratio is unity. In the structure of this

Card 2/4

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

ACCESSION NR: AP4043196

phase Mn and Na octahedra may alternate. A strong "dilution" by Na octahedra should strongly decrease or altogether exclude Mn-Mn interactions. The crystals exhibit red luminescence under UV excitation; they do not luminesce under x-ray excitation. The appearance of a 650 mμ band at room temperature can be ascribed to the considerable weakening or the complete absence of the Mn-Mn interaction. The absorption spectrum taken on an EPS-2V spectrophotometer is described. The chemical analysis was performed by V. S. Bykova. "The authors thank Academician N. V. Belov for help in carrying out the work and Dr. of Phys.-math Sci. L. M. Belyayev for a useful discussion of the results."Orig. art. has: 3 tables and 3 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography AN SSSR)

SUBMITTED: 19Sep63 ENCL: 01

SUB CODE: SS NR REF SOV: 001 OTHER: 002

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

LITVIN, B.N.; DIANOVA, I.M.; KACHAN, L.A.

Synthesis and properties of single crystals of the composition $Na_2O \cdot 2MnO \cdot 2SiO_2$. Kristallografiia 9 no.4:571-574 Jl-Ag '64. (MIRA 17:11)

1. Institut kristallografii AN SSSR.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

DIANOVA, K.G.

Composting peat. Mikrobiol. zhur. 17 no.4:66-67 '55
(MLRA 10:5)

1. Z Institutu mikrobiologii AN URSR
(COMPOST) (PEAT)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

USSR/Soil Science - Organic Fertilizers. J-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39030

Author : Dianova, K.

* Inst :

Title : Microbiological Study of Peat Composts. Communication 2. The Influence of Peat Composts on the Microflore of the Rhizosphere of Agricultural Crops.

Orig Pub : Mikrobiologichniy zh., 1956, 18, No 2, 11-16.

Abstract : Experiments showed, that the introduction of peat composts in soil contributes to the increase of the total amount of microorganisms in the rhizosphere of potato and rye. In the potato rhizosphere in certain periods of the growth, ammonifying, nitrifying, nitrofixing and cellulose decomposing soil activity increases as well as the content of general and hydrolyzed nitrogen.

* Z Institut mikrobiologii AN URSR.

Card 1/1

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

MARTAKOV, A.A.; DIANOVA, O.P.

Processing berries before the extraction of juice by a ferment preparation of Aspergillus niger. Trudy Inst.mikrobiol.i virus.AN Kazkah.SSR 6:146-154 '62. (MIRA 15:8)
(ASPERGILLIUS) (BERRIES) (ENZYMES)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

MARTAKOV, A.A.; DIANOVA, O.P.; KRASNOSHCHEKOVA, V.S.

Evaluation of the activity of pectolytic enzymes based on the optical density and viscosity of the pectin solution. Trudy Inst. mikrobiol. i virus. AM Kazakh. SSR 7:69-76 '63 (MIRA 16:12)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

DIANOVA, R.G.

Mechanism of the hypotensive effects of platyphylline. Farm.i toks. 23 no.1:13-17 Ja-F '60. (MIRA 14:3)

1. Kafedra farmakologii Astrakhanskogo gosudarstvennogo meditsinskogo instituta (zav. - prof. G.A.Malov [deceased]) i kafedra farmakologii Kalininskogo gosudarstvennogo meditsinskogo instituta (zav. - dotsent M.M.Desnitskaya).
(HYPERTENSION) (ALKALOIDS)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

DIANOVA, R.G.

Effect of platphyllino on the activity of certain substances depressing the central nervous system. Farm. i toks. 23 no.2:106-109 Mr-Ap '60. (MIRA 14:3)

1. Kafedra farmakologii Astrakhanskogo gosudarstvennogo meditsinskogo instituta (zav. - prof. G.A.Malov [deceased]) i kafedra farmakologii Kalininskogo gosudarstvennogo meditsinskogo instituta (zav.-dotsent M.M.Desnitskaya).
(ALKALOIDS) (PSYCHOPHARMACOLOGY)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

DIANOVA, R.G., assistent

Mechanism of corchoroside action on vessels. Trudy KGMI no.10:198-201 '63. (MIRA 18:1)

1. Iz kafedry farmakologii (zav. kafedroy - doktor med. nauk M.M. Desnitskaya) Kalininskogo gosudarstvennogo meditsinskogo instituta.

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DIANOVA, R.G.

Effect of strophantin on vessels in changes of carbohydrate metabolism. Farm. i toks. 28 no.1:55-57 Ja-F '65. (MIRA 18:12)

1. Kafedra farmakologii (zav. - prof. M.M.Desnitskaya) Kalininskogo meditsinskogo instituta. Submitted July 23, 1963.

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W. Eitel

ДИАНОВА Т. В.

Tuffaceous lavas in the districts of Isovsk and Krasnoural'sk, T. V. Dianova and G. A. Kufitaina; *Trudy Gorno-Geol. Inst., Akad. Nauk S.S.S.R., Ural. Filial* 1955, No. 20, 182–92.—Volcanic rocks intermediate between lava flows and tuff ejectamenta have been described by Abikh (1882) from Armenia, later from Kamchatka, and the Crimea. New quarry and fluviatile erosion aspects are given from the northern part of the Middle Ural, with typical taxitic textures, larger or smaller volcanic bombs or lapilli embedded in a tuffaceous to dense lava cement. Typical analyses are given for such bombs of quartz-porphyrite, and pyroxene-plagioclase-porphyrite compn., and of the "binder" cement which is usually also of the pyroxene-plagioclase porphyritic type. Complete analyses (4) of gray-violet or dark-green tuffaceous lavas of the Krasnoural'sk district show decreasing CaO contents related to increasing Na_2O content: a typical albitization process. The strong color changes in the rocks are detd. by the more or less pronounced changes in the ratios FeO:Fe_2O_3. A very fresh rock of the type mentioned above from a depth of 129 m. showed an andesitic-dacitic compn. with 4.58% FeO; and only 0.64% Fe_2O_3; Na_2O is high (4.72%), K_2O low (0.53%), CaO and MgO are 1.88% and 2.10%, resp. The andesitic tuffaceous lavas of the Isovsk district also show intense albitization, chloritization, and leucoxene in the cementing portions, also silicified variations in dark-colored and even dense samples, with abundant chalcedony, carbonates, and epidote. The original brecciated structure of

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DIANOVA, T.V.

Volcanic rocks in the eastern part of the Pavda region.
Gor.-geol.inst.UFAN SSSR no.33:3-139 '59. (MIRA 13:4)
(Ural Mountains--Rocks, Igneous)

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DIANOVA, T.V.

Sulfide mineralization in rocks of the brecciated formation in the Sultanovo pyrite deposit. Trudy Gor.-geol. inst. UFAN SSSR no.43: 153-160. '59. (MIRA 13:11)
(Sultanovo region--Pyrites) (Breccia)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320011-9

DIANOVA, T.V.

Examples of ancient tuff lavas in volcanogenic strata of the Central Urals. Trudy Lab. vulk. no.20:165-168 '61. (MIRA 14:11)

1. Gornogeologicheskiy institut Ural'skogo filiala AN SSSR.
(Ural Mountains--Volcanic ash, tuff, etc.)

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DIANOVA, T.V.

Some remarks on the nomenclature of effusive rocks. Izv.AN SSSR. Ser.geol. 26 no.1:94-96 Ja '61. (MIRA 15:6)
(Rocks, Igneous--Nomenclature)

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DIANOVA, T.V.

Vein rocks of the Sultanovskoye pyrite deposit in the Central Urals. Trudy Inst. geol. UFAN SSSR no.70:169-184 '65.
(MIRA 18:12)

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9.2560
9.2580 (1163)

24875

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D262/D306

AUTHORS: Braginskiy, V.B., Dianova, V.A., and Mustel', Ye.R.

TITLE: Investigation of the operation of a frequency multiplier using the non-linear capacity of the p-n--junction

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 7, 1961, 1173 - 1177

TEXT: The above problem was investigated for large coefficients of multiplication (up to n = 50). Main scheme of the multiplier is given in Fig. 2. The multiplier consists of a 70 ohm coaxial line and a standard coaxial - waveguide passage. In the gap is situated diode 1, with its non-linear capacity. An alternating potential from a generator (frequency range: 184 - 600 Mc/s) is connected to the input of the multiplier through a constant attenuator (10-12 db). Maximum power from the generator: 3.5 W. Coaxial piston 2 and the non-linear element form the input contour. Piston 3 is isola-

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Investigation of the ...

ted from the outside tube of the coaxial. The output contour is formed by coaxial piston 3 and two quarterwave beakers 4. Through a diaphragm it is connected with a rectangular resonator which filters out the harmonics of a corresponding n-number. The Q-factor of the resonator is 200, which reduces the neighboring harmonics with 20 db in comparison. Without filtering, these harmonics are 5 times smaller, than the chosen harmonics. The output signal is fed into a spectroanalyzer, specially calibrated for power, or into a standard power meter. The output power of the multiplier is shown graphically as a function of the number of harmonics. Input signal changed from 184 to 600 Mc/s, output signal (9000 Mc/s) and input power remained constant. The ordinate represents the ratio of the output power of n-th harmonics to that of the 49th harmonics. -At input power P_{in} = 100-150 mW, the output power saturates, there for smaller coeffficients of multiplication. For the investigation of phase stability 2 identical multipliers were used, with two valves and measuring line of the same direction. The signal came from a common generator. After 1½ hours of warming up, the device

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was working for 9 hours without break. The amplitude changed by 19 %. Change in phase difference was less than 60^{0}. To investigate the possibilities of modulation, an additional 10 Mc/s alternating signal was fed in. The spectro-analyzer showed a split of the line into components, standing at 10 Mc/s from each other. With large modulation it is possible to redistribute the energy between the central line and the side components. The greatest observed output power: 2.5 mW ($n = 36$, $\tau = (R_s C)_{u=-10v} = 0.36 \cdot 10^{-12}$ sec) the input power being of the order of 250 mW. This means that the transformation loss was not more than 20 db, which is 11 db better than the minimum loss observed, when an active non-linear element is used with an ideal filtering system on the same harmonics. The coefficient of power transformation and the magnitude of output power are slightly higher than those for a two-cascade multiplier. This type of multiplier can be used in measurements and also as a high-stability heterodyne. To achieve power of the order 1 mW, the time constant of p-n junction of the diode should be better than $1 \cdot 10^{-12}$ sec. There are 6 figures and 7 non-Soviet-bloc referen-

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Investigation of the ...

ces. The references to the 4 most recent English-language publications read as follows: C.H. Page, Harmonic generation with ideal rectifiers, Proc. I.R.E., 1958, 46, 10, 1738; D. Leenov, A. Uhlir, Jr., Generation of harmonics and subharmonics at microwave frequencies with p-n junction diodes, Proc. I.R.E., 1959, 10, 1734; D.B. Leeson, S. Weinreb, Frequency multiplication with non-linear capacitors - A circuit analysis, Proc. I.R.E., 1959, 12, 2076; R. Lowell, M. Kiss, Solid-state microwave power sources using harmonic generation, Proc. I.R.E., 1960, 7, 1834.

ASSOCIATION: Fizichesky fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova, kafedra teorii kolebaniy (Faculty of Physics, Moscow State University im. M.V. Lomonosov, Department of Theory of Oscillations)

SUBMITTED: November 17, 1960

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